

## CLAIMS

Amend the claims as follows.

- 1.-6. (Canceled)
7. (Previously presented) An interpolator, comprising:  
a feature extractor to populate a feature table by identifying image features in a pixel array;  
a feature comparator to populate a match table by matching features in the feature table.
8. (Previously presented) The interpolator of claim 7 where the image features are ramps, edges, segments, or noise.
9. (Previously presented) The interpolator of claim 7 where the feature extractor is adapted to be programmable.
10. (Currently amended) The interpolator of claim 7 where the image features is are adapted to dynamically change according to user preferences.
11. (Previously presented) The interpolator of claim 7 where the feature extractor includes a state machine for each image feature.
12. (Previously presented) The interpolator of claim 7 where the feature comparator is adapted to match image features in adjacent rows of the pixel array.
13. (Previously presented) The interpolator of claim 7 where the feature comparator is adapted to match image features in adjacent columns of the pixel array.
14. (Previously presented) The interpolator of claim 7 comprising an alignment controller to align matched image features in the match table.
15. (Previously presented) The interpolator of claim 14 where the alignment controller is adapted to compute relative shifts between adjacent rows or columns.